

**HOST:** Suicide in the United States has been on the rise for several years, becoming one of the top public health crises in the country, one that impacts Americans of all ages. Some of the trends in suicide have been somewhat unpredictable. For example, there has long been a belief that suicides peak during the holiday season. But the data show that is not the case. Over the past nearly two decades, December regularly has had the second fewest number of suicides, higher only than February, which of course is a shorter month. Generally, it is the warm-weather months – May thru August – in which the number of suicides peak each year.

When the pandemic hit in 2020, in addition to nearly 400,000 COVID-related deaths in the U.S., there was a record increase in the homicide rate and a continued spike in the number of drug overdose deaths in the country. The assumption is that the number and rate of suicide in the country would follow that pattern – particularly after the number of suicides had risen every year between 2004 and 2019.

However, between 2018 and 2019, there was a minor decline in suicide, and this decline actually continued into the pandemic year of 2020.

Joining us to talk today is Sally Curtin, a statistician with NCHS, who is the author of a new [report](#) looking at suicide during 2020.

**HOST:** Despite other causes of death such as drug overdoses and homicides spiking during the pandemic, your data show suicide actually declined, correct?

**SALLY CURTIN:** Yes that is correct. The number, just under 46,000 in 2020, was 3% lower than in 2019 and also the rate of suicide per 100,000 population was 3% lower as well. Now, this is actually building on a decline which actually had started before COVID. There was the first decline in almost 20 years from 2018 to 2019 in suicide – of about 2% - and that's after an almost steady increase in suicide between about the year 2000 and 2018... it had increased by 35% during that time

**HOST:** Was it a surprise that suicide dropped in 2020, particularly given the historic increases in homicide and drug overdose deaths?

**SALLY CURTIN:** That's a good question because we do know - there's documented evidence - that some risk factors for suicide definitely increased during 2020. And some of those risk factors are mental health issues such as depression, anxiety... Also, substance abuse increased during 2020 as well as job and financial stress. And those are known risk factors for suicide. So, people were concerned that the actual suicide deaths would increase. But in the very first sentence of our report we say that suicide is complex and it's a multi-faceted public health issue. So it's not as easy to say, "OK, these risk factors went up for this cause of death; therefore, you know, the deaths are going to go up." Suicide is much more complex than that. There are, as well as risk factors there are elements of, obviously, prevention as well as intervention. So some of those factors - prevention and intervention - were definitely going on during 2020, and so therefore it's hard to say and I think in general suicide is just harder to predict than a lot of other causes of death.

**HOST:** So then would you say that (with) the fact that suicide declined two years in a row, is this officially a new trend?

**SALLY CURTIN:** It's hard to say. I mean, certainly it's positive in that it's not continuing to trend upward as it had been for so many years. But also let me point out it still is historically high - the number is historically high as well as the rate. They're both high over the last 20 years. They're just a little bit lower than the peak in 2018. But certainly having two years of declines gives you some hope that it might continue.

**HOST:** Your new study looked at suicide during 2020 on a monthly basis - what were some things that stood out in your analysis?

**SALLY CURTIN:** For the most part, in early 2020 - in January and February - the numbers were higher than in 2019. But starting in March they went lower, and pretty much suicide numbers in 2020 were lower than in 2019 for the rest of the year, except in the month of November where they were just slightly higher. Now what really stood out is the month of April, where the suicide number in 2020 was 14% lower than in 2019, and that was the greatest percentage difference of any month. And we typically don't see that big of a change year over year in monthly numbers, so that stood out. And also it changed sort of the yearly pattern of suicides in general - the month that has the lowest number tends to be in the winter or maybe late Fall but in 2020, April was the month with the lowest number

**HOST:** That is interesting - would you say that it's counter-intuitive given that everyone was in lockdown and a lot of people weren't working etc?

**SALLY CURTIN:** You would think so and we definitely heard that calls to suicide hotlines just, they just blew up and one study said they went up 800%. So we do know that people were stressed, but we also know that they were reaching out a lot and so... yeah it is (a surprise) - I think most people will be surprised there was that large drop in April. And I'll leave it to others to really sort of explain what was going on - you know, whether everyone was just sort of in shock or if the stigma of maybe reaching out wasn't quite what it normally is during regular times.

**HOST:** It looks like the data suggest that the declines were pretty much across the board. Is that correct?

**SALLY CURTIN:** Well, for females that's pretty much correct. And I mean by race and ethnicity groups - all of the groups for females were lower in 2020 than 2019. And the greatest percent decline was for Non-Hispanic white females. There was actually a drop of 10%, and that decline reached statistical significance. But even for females the declines really started at age 35 and over. For the younger females ages 10 to 34, rates were either the same or actually increased a bit. For males, there was a mixed picture. Non-Hispanic white males, as well as Non-Hispanic Asian males, had a decline but groups of minority males had increases. Non-Hispanic black men had an increase in their rates... Hispanic men... as well as Non-Hispanic American Indian men... And once again, for men, the groups for which there was a decline tended to be in middle-age or older ages, starting with age 35. It was not apparent in the young people ages 10 to 34.

**HOST:** The increases among Non-Hispanic black and Hispanic and any other minority group - had these increases been happening prior to 2020 as well?

**SALLY CURTIN:** Yes, pretty much all of these groups that saw those increases from 2019 and 2020 had been trending upward. The difference is for white and Asian, they had also been trending upward but now they've turned. So yes, it was just a continuation of a generally upward trend.

**HOST:** Do you have any indications that the decline in suicide is continuing in 2021?

**SALLY CURTIN:** So far we do not have any provisional data for 2021 and something that is brought out in the report is that we don't typically do suicide reports with provisional data because unlike other causes of death it can take longer to get an accurate cause of death saying that it's suicide. An example is in the context of a drug overdose. Often, they have to do toxicology analysis to figure out if the intent was actually suicidal or if it was just accidental. So for that reason suicide figures tend to lag behind other causes of death and unfortunately right now we don't have any numbers at all for 2021.

**HOST:** OK, well any other points to add?

**SALLY CURTIN:** I think just you know that the overall decline - it's probably unexpected or for a lot of people because there were known increases in risk factors. But to just point out once again that although there was an overall decline, this was a lot driven by what happened with the majority group, with Non-Hispanic whites who have among the highest rates and the numbers of suicide. So the fact that Non-Hispanic white women were down 10%, Non-Hispanic white men were down 3%, it sort of drove the overall decline. And there were some groups that just did not experience declines - in fact, they experienced increases. In particular, Hispanic men had an increase of 5% and that did reach statistical significance, but there were also increases for Non-Hispanic black men and Non-Hispanic American Indian men. So it is encouraging that the overall rate declined, but we certainly need to continue to be vigilant and to realize that this decline was not experienced by everyone.

**HOST:** Alright, thank you Sally for joining us.

**SALLY CURTIN:** Oh sure. Thank you.

### **(MUSICAL BRIDGE)**

**HOST:** To this point, there has been a scarce amount of published mortality data on the American Indian or Alaska Native population. A primary reason for this shortage is poor data quality, due to the misclassification of race and ethnicity on death certificates in the country. Previous studies have shown that nearly one-third of individuals who self-identify as American Indian/Alaska Native are misclassified to a different race/ethnic group on their death certificates when they die. The end result that mortality is underestimated for this population.

A new report slated for release next week attempts to address this issue of misclassification, and present a more complete mortality profile for the non-Hispanic American Indian/ Alaskan Native population. The report will feature death rates by age, as well as leading causes of death and life

expectancy estimates in comparison with the three major race/ethnic groups in the U.S.: Non-Hispanic white and black, as well as Hispanic.

Another report next week focuses on mortality from Sepsis in the United States. Sepsis is an extreme response to an infection, and may lead to serious medical complications and death if not treated quickly. In 2019, there were over 200,000 deaths in the U.S. involving sepsis, with three-quarters of those deaths among people age 65 and over. Nearly 10% of all COVID-related deaths also involve sepsis. This new report focuses on the 65-and-over population and also provides data by gender, race and Hispanic origin, and urbanicity.

On November 16, NCHS will also release the latest quarterly data from the National Health Interview Survey, which includes a new report on health insurance coverage in America. In addition, there will be updates to the on-line interactive data visualization dashboard with new data on mental health, asthma, disability, hypertension, dental visits, access to health care, smoking and e-cigarette use. The data cover the period through mid-year 2021.

The following day, the latest monthly drug overdose death numbers are expected to be released for the one-year period ending in April of this year. Last month's release showed the U.S. had nearly 100,000 overdose deaths in the 12 months ending in March.

November features several national health observances... This month is American Diabetes Month, the initiative to create awareness for a disease that killed over 100,000 Americans in 2020, according to provisional data. Diabetes is the 8<sup>th</sup> leading cause of death in the country... November is also Lung Cancer Awareness Month. Lung cancer killed nearly 140,000 Americans in 2019, making it the leading cause of cancer death in the U.S... And this month is also National Alzheimer's Disease Awareness Month. Alzheimer disease is the 7<sup>th</sup> leading cause of death in the country, accounting for over 133,000 deaths in 2020, according to provisional data.

Next month, the NCHS "Statcast" will feature several new studies, with special focus on how the pandemic impacted the number of home births in the U.S.